UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

U.S. PHILIPS CORPORATION,

Plaintiff

v.

KONICA MINOLTA HOLDINGS, INC. KONICA MINOLTA PHOTO IMAGING, INC., KONICA MINOLTA PHOTO IMAGING U.S.A., INC.,

LG ELECTRONICS, INC., and LG ELECTRONICS MOBILECOMM U.S.A., INC.

Defendants.

U.S. PHILIPS CORPORATION,

Plaintiff

v.

PANTECH WIRELESS, INC.,

Defendant.

Civil Action No. 06-CV-1402 (BSJ) (THK)

REFERRED TO MAGISTRATE JUDGE KATZ

Civil Action No. 1:08-cv-2526 (BSJ)

LG ELECTRONICS, INC., LG ELECTRONICS MOBILECOMM U.S.A., INC. AND PANTECH WIRELESS, INC.'S

SUPPLEMENTAL CLAIM CONSTRUCTION BRIEF REGARDING RECENT U.S. PATENT & TRADEMARK OFFICE DECISION FOR U.S. PATENT NO. 4,901,075

LG Electronics, Inc. and LG Electronics MobileComm U.S.A., Inc. (collectively "LGE") and Pantech Wireless, Inc. ("Pantech") (collectively "Defendants") submit this supplemental claim construction brief to bring to the Court's attention a recent order of the United States Patent and Trademark Office ("PTO"), relating to the claim scope of the patent-in-suit, U.S. Patent No. 4,901,075 ("the '075 patent").

I. INTRODUCTION

On March 27, 2008, the PTO issued an order granting a request for reexamination of the '075 patent. [Ex. 1.] The PTO order held that the request raised substantial new questions regarding the patentability of the '075 patent claims 3-4, 7-8 and 11 [id. at 2], which are the same claims asserted in the above-captioned litigations.

This PTO order qualifies as intrinsic evidence that should be considered in determining claim constructions for the '075 patent. As a result, this order applies directly to the pending claim construction issues presently before the Court. See E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1439 (Fed.Cir.1988) (statements made during reexamination proceeding are relevant prosecution history when interpreting claims); Advanced Card Technologies, LLC. v. Versatile Card Technology, Inc., 410 F.Supp.2d 158, 168 (SDNY 2006) (finding re-examination proceedings to be intrinsic evidence).

ARGUMENT II.

The PTO order determines two claim constructions. Both claim constructions, if followed by this Court, are case dispositive. First, the PTO considered the claim element "code word" and held that it means a "single code word" and not two code words in combination to represent a run of zeros and a following non-zero coefficient. This claim construction is dispositive of non-infringement as the accused JPEG standard uses two separate code words: one code word for the run length and a separate code word for the exact value of the non-zero coefficient. [See LGE presentation at the December 20, 2007 Claim Construction Hearing, e.g., slides 19-20]. Since all the asserted claims require the "single code word," the accused JPEG standard does not infringe any asserted claim. Second, the PTO considered the claim elements "zero coefficient" and "non-zero coefficient" and concluded they include prior art "binary

¹ See attached March 27, 2008, Decision Granting Ex Parte Reexamination ("PTO order").

systems" where the values are **only zeros and ones**. This claim construction is dispositive as the limitations of all asserted claims are found in binary prior art systems, rendering these claims invalid.

The attached PTO order resulted from a Request for Reexamination filed by a thirdparty² on February 7, 2008, that requested the PTO reexamine the patentability of claims 3, 4, 7, 8, and 11 of the '075 patent – the same claims at issue in the present actions. The reexamination request asserted that when the PTO issued these claims, it did not consider a number of prior art references that render invalid each of these claims. On March 27, 2008, the PTO granted this reexamination request, and found that the cited references raised "substantial new questions of patentability." [Ex. 1 at 2.] The grant of the reexamination request starts a procedure in the Patent Office where the PTO will once again evaluate the patentability of these claims. See 37 C.F.R. 1.510 et seq. The reexamination can conclude with claims being cancelled as unpatentable, modified or left unchanged.

This Court should adopt the PTO's determination of the meaning and scope of claim terms in deciding the claim construction issues in the present actions. The PTO's decision granting the reexamination confirms as correct LGE's proposed construction for the term "code word" as a single, unique code word from a single code table, and LGE's proposed construction for "zero coefficient" and "non-zero coefficient" as including coefficients that are only 0 ("zero coefficient") and 1 ("non-zero coefficient"). The PTO's order rejects Philips' positions on both of these claim constructions.

² The third party who requested the reexamination is Kodak, who was the defendant in the *Philips v. Kodak* litigation in Delaware before Judge Sleet.

³ Counsel for LGE received a copy of the order on April 2, 2008.

Claim Term: "code word" A.

Regarding the proper construction for "code word," the third-party requested reexamination on the basis that the Chen 1984 article⁴ disclosed two code words generated from two code tables that together form a single "composite" code word. [Ex. 1 at 10-11].⁵ (The two code words of the Chen 1984 article are discussed extensively in LGE's claim construction briefs⁶ and depicted in LGE's presentation to the Court at the December 20, 2007, Claim Construction Hearing, see, e.g., slides 7, 15, 20.) Since the first code word encodes the run length and the second code word encodes the exact value of the following non-zero coefficient, the third-party requester argued that these two code words form a "composite" code word that discloses the claimed "code word." The PTO rejected such a claim construction for "code word," finding that the claimed "code word" does not include "composite code words." [Ex. 1 at 10-11.]

The PTO's order concludes that the '075 patent requires a single code word and does not cover a combination of two sequential code words. In arriving at this ruling, the PTO had to evaluate whether the '075 patent was anticipated by the Chen 1984 article, and determine the proper construction for the term "code word" in the context of the '075 patent. The PTO found that the '075 patent did not cover a "composite" of two sequential code words:

> The examiner disagrees. They are not equivalent. The claim requires a single code word to represent the non-zero coefficient and the run length whereas the Chen article teaches the combination of two code words to represent the non-zero coefficient and the run length. Because this limitation is the key of the '075 patent as explained in the background and summary sections of the '075 patent, it is not agreed that the Chen article raises a substantial new question of patentability to claims 3-4 and 7-8 of the '075 patent.

⁴ Dkt #61-5 [Wen-Hsiung Chen and William K. Pratt, "Scene Adapter Coder", IEEE Transactions on Communications, Vol. COM-32, No. 3, pp. 225-32 (Mar. 1984) ("Chen 1984 article")].

⁵ To avoid burdening the Court, Defendants have not attached Kodak's re-examination request and supporting documents, but upon request will immediately provide them in either electronic or paper format.

⁶ See Dkt 61 at 1-7, 24-27 (LGE Opening Brief); Dkt 69 at 25-29 (LGE Reply Brief).

[Id. at 10-11 (emphasis added).] 7

In fact, this claim construction is consistent with Philips' arguments to the PTO during the original prosecution to distinguish over prior art rejections:

According to the teaching of Fukoka there would be assigned a code word to the run of [zero coefficients] and a further code word to the non-zero coefficient. However, in accordance with the instant invention, there is assigned only one codeword to the entire event. This codeword depends on the number of zero coefficients ... and the value of the non-zero coefficient. Different codewords are assigned to events having the same number of zero coefficients but different values of the non-zero coefficient.8

LGE's proposed construction for "code word" as "a unique representation in a single code table for an event" [Dkt. 69-2 at 2 (LGE Reply Brief)], attempted to define the same "single code word" construction used by the PTO. In light of this new PTO order, LGE and Pantech suggest that "unique representation" should also include the word "single" to distinguish "composite code words." Accordingly, LGE and Pantech now propose that "code word" should be construed as "a single unique representation in a single code table for an event." The construction for "code word" should exclude a combination of a code word for the run length and a code word for the actual value of the non-zero coefficient.

Claim Terms: "zero coefficient" and "non-zero coefficient" В.

The second issue where the PTO determined claim construction is "zero coefficient" and "non-zero coefficient." Philips' proposed claim construction excludes coding where the only values present are 0 and 1 (the so-called "binary systems"). [Dkt 60-2 at 27-28 (Philips Opening Brief).] In contrast to Philips' claim construction, the third-party requested reexamination based on numerous prior art binary systems. Rather than rejecting this prior art as inapplicable (as

⁷ In contrast, the PTO found that when the Chen 1984 article was combined with other prior art references that disclosed "a combine coding technique to code a run of zero values and a non-zero value together using a single codeword," that these combinations do raise a substantial new question regarding patentability. [Ex. 1 at 11-12 (italics added).]

⁸ Dkt 61-8 at LGE 082355 ['075 Prosecution History; filed at Dkt 61-6 through Dkt 61-9 (emphasis added).]

5

Philips' claim construction would do), the PTO embraced the binary systems, found that the claims cover binary systems, and concluded there was a "substantial new question of patentability" for the asserted claims in light of eight prior art systems which Philips alleges are only binary.

Specifically, the PTO noted that the U.S. Patent No. 4,698,672 ("the '672 patent") to Chen raises a substantial new question of patentability for claims 3-4 and 7-8 of the '075 patent. The passage relied on within the '672 patent discloses assigning a single code word to a run of zeros followed by a one. [Ex. 1 at 8.] The PTO did not rely on other parts of the Chen '672 patent that disclose coding runs of zeros followed by numbers greater than one. Significantly, the PTO then found that: (1) U.S. Patent No. 3,948,833 to Van Voorhis, which discloses solely a black-and-white binary coding system that uses only zeros and ones, raised a substantial new question of patentability for claim 8 of the '075 patent [id. at 9-10]; and (2) seven other binary references that Philips contends are binary, in combination with the Chen 1984 article, raised substantial new questions of patentability for claims 3-4, 8 and 11, and may render each invalid as obvious [id. at 11-12]. The import of these findings—contrary to Philips' proposed claim construction—is that binary systems are clearly within the meaning of the claim terms "zero coefficient" and "non-zero coefficient."

The PTO's claim construction is fully consistent with the plain meaning of the words "zero" and "non-zero." It also rejects Philips' argument that it redefined these words during prosecution when it stated that the claims are not limited to binary systems, but also include non-binary systems. Moreover, even this statement by Philips during prosecution expressly includes the value of 1:

In the instant invention, the coefficients are not limited to either ones or zeros, i.e., they are not merely binary. They can have any one of the values zero, one, two, three, and up to, for example, 256 if eight bits are used to code them.

As the PTO found, "non-zero" includes 1 (and may also include numbers larger than 1).

III. CONCLUSION

LGE and Pantech request this Court consider the recent attached PTO order, which is intrinsic evidence, and adopt the PTO's claim constructions.

Respectfully submitted,

Dated: April 10, 2008

By:

Alan D. Smith (AS 1850) Peter J. Kirk (PK 6401) FISH & RICHARDSON P.C. 225 Franklin Street

Boston, MA 02110-2804 Tel: (617) 542-5070 Fax: (617) 542-8906

Duane David Hough (DH 2438) FISH & RICHARDSON P.C. Citigroup Center - 52nd Floor 153 East 53rd Street New York, NY 10022-4611

Tel: 212-765-5070 Facsimile: 212-258-2291

Attorneys for LG ELECTRONICS, INC., LG ELECTRONICS MOBILECOMM U.S.A., INC., AND PANTECH WIRELESS, INC.

⁹ Dkt 61-8 at LGE 082354 ['075 Prosecution History) (emphasis added).]

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing LG ELECTRONICS, INC., LG ELECTRONICS MOBILECOMM U.S.A., INC. AND PANTECH WIRELESS, INC.'S SUPPLEMENTAL CLAIM CONSTRUCTION BRIEF REGARDING RECENT U.S. PATENT & TRADEMARK OFFICE DECISION FOR U.S. PATENT NO. 4,901,075 was served on the parties noted below by ECF:

Alan M. Grimaldi Brian A. Rosenthal Howrey LLP 1299 Pennsylvania Avenue, N.W. Washington, DC 20004 Attorney for Plaintiff U.S. PHILIPS CORPORATION

Charles B. Updike, Esq. Schoeman, Updike & Kauffman, LLP 60 East 42nd Street New York, NY 10165 Attorney for Plaintiff U.S. PHILIPS CORPORATION

on April 10, 2008.

Peter J. Kirk
Attorneys for Defendant

LG ELECTRONICS, INC., LG ELECTRONICS

MOBILECOMM U.S.A., INC., AND

PANTECH WIRELESS, INC.

21899366.doc



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 03/27/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/010,104	02/07/2008	4901075	223612-25	5714
24737	7590 03/27/2008		EXAM	INER
		PERTY & STANDARDS	. •	
P.O. BOX (3001 IFF MANOR, NY 1051	0	ART UNIT	PAPER NUMBER

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.spro.gov

DO NOT USE IN PALM PRINTER

(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

DLA PIPER US LLP

2000 UNIVERSITY AVENUE

E. PALO ALTO, CA 94303-2248

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. <u>90/010,104</u>.

PATENT NO. <u>4901075</u>.

ART UNIT <u>3992</u>.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Case 1:08-cv-02526-BSJ Document 4-2 Filed 04/10/2008 Page 3 of 20

	Control No.	Patent Under Reexamination
Order Granting / Denying Request For	90/010,104	4901075
Ex Parte Reexamination	Examiner	Art Unit
	MINH NGUYEN	3992
The MAILING DATE of this communication appe	ears on the cover sheet with the	correspondence address
The request for <i>ex parte</i> reexamination filed <i>07</i> has been made. An identification of the claims, determination are attached.		
Attachments: a) PTO-892, b) PT	O/SB/08, c) Other: _	
1. The request for <i>ex parte</i> reexamination is	GRANTED.	·
RESPONSE TIMES ARE SET AS F	FOLLOWS:	
For Patent Owner's Statement (Optional): TW (37 CFR 1.530 (b)). EXTENSIONS OF TIME A		
For Requester's Reply (optional): TWO MONT Patent Owner's Statement (37 CFR 1.535). Not If Patent Owner does not file a timely stateme is permitted.	O EXTENSION OF THIS TIME	PERIOD IS PERMITTED.
2. The request for <i>ex parte</i> reexamination is	DENIED.	
This decision is not appealable (35 U.S.C. 303 Commissioner under 37 CFR 1.181 within ONI CFR 1.515(c)). EXTENSION OF TIME TO FIL AVAILABLE ONLY BY PETITION TO SUSPE 37 CFR 1.183.	E MONTH from the mailing dat .E SUCH A PETITION UNDER	e of this communication (37 37 CFR 1.181 ARE
In due course, a refund under 37 CFR 1.26 (c) will be made to requester:	
a) Dy Treasury check or,		
b) Deposit Account No	, or	
c) Dy credit to a credit card account, u	nless otherwise notified (35 U.S	S.C. 303(c)).
c:Requester (if third party requester)		

cc:Requester (if third U.S. Patent and Trademark Office PTOL-471 (Rev. 08-06)

Application/Control Number: 90/010,104

Art Unit: 3992

Page 2

DECISION GRANTING EX PARTE REEXAMINATION

Reexamination has been requested for claims 3-4, 7-8 and 11 of the United States Patent Number 4,901,075 to Vogel, entitled "METHOD AND APPARATUS FOR BIT RATE REDUCTION".

A substantial new question of patentability affecting claims 3-4, 7-8 and 11 of the United States Patent Number 4,901,075 to Vogel (the '075 patent, hereafter) is raised by the request for *ex parte* reexamination.

Service of Papers

After the filing of a request for reexamination by a third party requester, any document filed by either the patent owner or the third party requester must be served on the other party (or parties where two or more third party requester proceedings are merged) in the reexamination proceeding in the manner provided in 37 CFR 1.248. See 37 CFR 1.550(f).

Extensions of Time

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that *ex parte* reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extensions of time in *ex parte* reexamination proceedings are provided for in 37 CFR 1.550(c).

Application/Control Number: 90/010,104

Art Unit: 3992

Amendment in Reexamination Proceedings

Patent Owner is notified that any proposed amendment to the specification and/or claims in this reexamination proceeding must comply with 37 CFR 1.530(d)-(j), must be formally presented pursuant to 37 CFR 1.52(a) and (b), and must contain any fees required by 37 CFR 1.20(c). See MPEP § 2250(IV) for examples to assist in the preparation of proper proposed amendments in reexamination proceedings.

Submissions

In order to ensure full consideration of any amendments, affidavits or declarations or other documents as evidence of patentability, such documents must be submitted in response to the first Office action on the merits (which does not result in a close of prosecution).

Submissions after the second Office action on the merits, which is intended to be a final action, will be governed by the requirements of 37 CFR 1.116, after final rejection and by 37 CFR 41.33 after appeal, which will be strictly enforced.

Notification of Concurrent Proceedings

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving the '075 patent throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

Application/Control Number: 90/010,104

Art Unit: 3992

Substantial New Question

The substantial new question of patentability (SNQP) consideration is based on the following references:

COST 211bis Simulation Subgroup Paper entitled "Block Coding Using a Two Dimensional Run-Length Table", published 9/9/1986, (COST paper, hereafter).

US Patent No. 4,698,672 to Chen et al., (Chen patent, hereafter).

US Patent No. 4,420,771 to Pirsch, (Pirsch patent, hereafter).

Wen-Hsiung Chen and William K. Pratt, "Scene Adapter Coder", IEEE Transactions on Communications, Vol. COM-32, No. 3, March 1984, pgs, 225-232, (Chen article, hereafter).

US Patent No. 4,363,036 to Subramaniam, (Subramaniam '036 patent, hereafter).

US Patent No. 4,316,222 to Subramaniam, (Subramaniam '222 patent, hereafter).

US Patent No. 4,494,151 to Liao, (Liao patent, hereafter).

US Patent No. 4,136,363 to Saran, (Saran '363 patent, hereafter).

US Patent No. 4,092,676 to Saran, (Saran '676 patent, hereafter).

US Patent No. 3,984,833 to Van Voorhis, (Van Voorhis patent, hereafter).

Henry Liao, "Upper Bound, Lower Bound and Run-Length Substitution Coding", NTC '77 Conference Record, Vol. 3, pgs 49:3-1 to 49:3-6 (1977), (Liao article, hereafter).

Application/Control Number: 90/010,104

Art Unit: 3992

Requester's Position

Page 5

The requester indicated that the requester considered that a substantial new question of patentability as to claims 3-4 and 7-8 of the '075 patent is raised based on the COST paper.

The requester further indicated that the requester considered that a substantial new question of patentability as to claims 3-4 and 7-8 of the '075 patent is raised based on the Chen patent.

The requester further indicated that the requester considered that a substantial new question of patentability as to claims 3-4 and 8 of the '075 patent is raised based on the Pirsch patent.

The requester further indicated that the requester considered that a substantial new question of patentability as to claim 8 of the '075 patent is raised based on the Van Voorhis patent.

The requester further indicated that the requester considered that a substantial new question of patentability as to claims 3-4 and 7-8 of the '075 patent is raised based on the Chen article.

The requester further indicated that the requester considered that a substantial new question of patentability as to claims 3-4 and 8 of the '075 patent is raised based on the Chen article and the Pirsch patent.

The requester further indicated that the requester considered that a substantial new question of patentability as to claims 3-4, 8 and 11 of the '075 patent is raised based on the Chen article and the Subramaniam '036 patent.

Application/Control Number: 90/010,104

Art Unit: 3992

The requester further indicated that the requester considered that a substantial new question of patentability as to claims 3-4, 8 and 11 of the '075 patent is raised based on the Chen article and the Subramaniam '222 patent.

The requester further indicated that the requester considered that a substantial new question of patentability as to claims 3-4, 8 and 11 of the '075 patent is raised based on the Chen article and the Liao patent.

The requester further indicated that the requester considered that a substantial new question of patentability as to claims 3-4, 8 and 11 of the '075 patent is raised based on the Chen article and the Saran '363 patent.

The requester further indicated that the requester considered that a substantial new question of patentability as to claims 3-4, 8 and 11 of the '075 patent is raised based on the Chen article and the Saran '676 patent.

The requester further indicated that the requester considered that a substantial new question of patentability as to claims 3-4 of the '075 patent is raised based on the Chen article and the Van Voorhis patent.

The requester further indicated that the requester considered that a substantial new question of patentability as to claims 3-4, 8 and 11 of the '075 patent is raised based on the Chen article and the Liao article.

Application/Control Number: 90/010.104

Art Unit: 3992

Analysis of the Prior Art Provided in the Request

It is agreed that the consideration of the COST paper raises a substantial new question of patentability to claims 3-4 and 7-8 of the '075 patent. As pointed out on pages 3-5 in the request, the COST paper discloses a method of coding a signal (title, "Block coding using a twodimensional run-length table") comprising a sequence of coefficients which results after a blockwise transform of pixels of a video signal with subsequent quantization (page 1, section 3, the COST paper discloses in table 1 a "histogram for composite events on a zig-zag scan of ... of the split screen scene), for transmission at a reduced bit rate (page 2, section 3, last paragraph, a bit rate reduction of approximately 12 percents), said signal comprising a plurality of zero coefficients, and a plurality of non-zero coefficients (page 1, section 2, the run-length of consecutive zero coefficients and coefficients unequal to zero) said method comprising the steps of (a) deriving from said signal, a plurality of events each comprising a run of said zerocoefficients having a respective run length and preceded or followed by at least one non-zero coefficient (page 1, section 2, appendix A, the COST paper describes: "For the 2D-run-length coding the events corresponding to a run-length of consecutive zero coefficients and coefficients unequal to zero defining the end of the run-length are considered as composite rather than separate statistical events ..."), and (b) for each of said events, determining said respective run length and assigning a code word to represent said non-zero coefficient and said run length (as shown in appendix A, a Huffman code for the composite events are assigned to each composite event that are a run-length of consecutive zero coefficients and coefficient unequal to zero). There is a substantial likehood that a reasonable examiner would consider these teachings important in deciding whether or not the claims are patentable. However, the prosecution history of the base application, US Serial No. 07/096,177, does not indicate that the

Application/Control Number: 90/010,104

Art Unit: 3992

COST paper was included for consideration by the examiner in charge of the base application. Accordingly, the COST paper raises a substantial new question of patentability as to claims 3-4 and 7-8 of the '075 patent which question has not been decided in the previous examination of the '075 patent.

It is agreed that the consideration of the Chen patent raises a substantial new question of patentability to claims 3-4 and 7-8 of the '075 patent. As pointed out on pages 6-8 in the request, the Chen patent discloses a method of coding a signal (title) comprising a sequence of coefficients which results after a blockwise transform of pixels of a video signal with subsequent quantization (abstract, video compression systems), for transmission at a reduced bit rate (abstract, making the signals more suitable for transfer through a limited-bandwidth medium). said signal comprising a plurality of zero coefficients, and a plurality of non-zero coefficients (figure 1, col. 4:45-49, forward processor 52) said method comprising the steps of (a) deriving from said signal, a plurality of events each comprising a run of said zero-coefficients having a respective run length and preceded or followed by at least one non-zero coefficient (runlength coding are generated of type R and R', wherein type R event combines a runlength of 0's followed by the next most frequency occurring value 1, col. 5:30-38), and (b) for each of said events, determining said respective run length and assigning a code word to represent said non-zero coefficient and said run length (tables 6-9, Huffman codes are used). Even though the base application, US Serial No. 07/096,177, that became the '075 patent cited the Chen patent of record, the examiner neither relied on the Chen patent to reject the claims nor gave the reason why the claims are patentable in view of the Chen patent, and the Chen patent discloses important features of at least claim 1 as discussed above, there is a substantial likehood that a reasonable examiner would consider these teachings important in deciding whether or not the

Application/Control Number: 90/010,104

Art Unit: 3992

claims are patentable. Accordingly, the Chen patent raises a substantial new question of patentability as to claims 3-4 and 7-8 of the '075 patent which question has not been decided in the previous examination of the '075 patent.

It is agreed that the consideration of the Pirsch raises a substantial new question of patentability to claims 3-4 and 8 of the '075 patent. As pointed out on pages 9-10 in the request. the Pirsch patent discloses a method of coding a signal (title) comprising a sequence of coefficients which results after a blockwise transform of pixels of a video signal with subsequent quantization, for transmission at a reduced bit rate (col. 1:45-57), said signal comprising a plurality of zero coefficients, and a plurality of non-zero coefficients (col. 2:39-45 and col. 3:2-5) said method comprising the steps of (a) deriving from said signal, a plurality of events each comprising a run of said zero-coefficients having a respective run length and preceded or followed by at least one non-zero coefficient (col. 11:25-43), and (b) for each of said events. determining said respective run length and assigning a code word to represent said non-zero coefficient and said run length (table 4, col. 1:60 to col. 2:9 and col. 7:5 to col. 8:15). There is a substantial likehood that a reasonable examiner would consider these teachings important in deciding whether or not the claims are patentable. However, the prosecution history of the base application, US Serial No. 07/096,177, does not indicate that the Pirsch patent was included for consideration by the examiner in charge of the base application. Accordingly, the Pirsch patent raises a substantial new question of patentability as to claims 3-4 and 8 of the '075 patent which question has not been decided in the previous examination of the '075 patent.

It is agreed that the consideration of the Van Voorhis raises a substantial new question of patentability to claim 8 of the '075 patent. As pointed out on pages 11-12 in the request, the

Application/Control Number: 90/010,104 Page 10

Art Unit: 3992

Van Voorhis patent discloses a method of coding a signal (title) comprising the steps of (a) transforming said signal into a sequence comprising zero coefficients occurring in runs and nonzero coefficients (Van Voorhis discloses that image points are transformed into a sequence of 0 or 1 to indicate that the corresponding area of the picture is light or dark, col. 1:19-23), (b) deriving from said sequence, a plurality of events each comprised of a run of zero-coefficients having a respective run length which is preceded or followed by at least one non-zero coefficient (col. 7:11-15 and col. 14:64-66), and (c) for each of said events, determining said run length and assigning a code word to represent said non-zero coefficient and said run length (Van Voorhis discloses coding of events where the event may include a string of one or more zeros and the first one following this string of zeros, col. 14:64-66. Examples of the codes used by the coder are shown in Tables 1 and 2). There is a substantial likehood that a reasonable examiner would consider these teachings important in deciding whether or not the claims are patentable. However, the prosecution history of the base application, US Serial No. 07/096,177, does not indicate that the Van Voorhis patent was included for consideration by the examiner in charge of the base application. Accordingly, the Van Voorhis patent raises a substantial new question of patentability as to claim 8 of the '075 patent which question has not been decided in the previous examination of the '075 patent.

It is not agreed that the consideration of the Chen article raises a substantial new question of patentability to claims 3-4 and 7-8 of the '075 patent. The requester indicated that the Chen article teaches the limitation "for each of said events, determining said respective run length and assigning a code word to represent said non-zero coefficient and said run length" because the Chen article teaches assigning a code word for the run length and a code word for the non-zero coefficient to form a composite code word that is a sequence of bits that represent

Application/Control Number: 90/010,104

Art Unit: 3992

a particular event or events in accordance with a predefined set of rules. The examiner disagrees. They are not equivalent. The claim requires a single code word to represent the non-zero coefficient and the run length whereas the Chen article teaches the combination of two code words to represent the non-zero coefficient and the run length. Because this limitation is the key of the '075 patent as explained in the background and summary sections of the '075 patent, it is not agreed that the Chen article raises a substantial new question of patentability to claims 3-4 and 7-8 of the '075 patent.

It is agreed that the consideration of the combination of the Chen article and one of the Pirsch patent, the Subramaniam '036 patent, the Subramaniam '222 patent, the Liao patent, the Saran '363 patent, the Saran '676 patent, the Van Voorhis patent and the Liao article raises a substantial new question of patentability to claims 3-4, 8 and 11 of the '075 patent. As pointed out on pages 17-71 in the request, the Chen article discloses a method of coding a signal comprising a sequence of coefficients which results after a blockwise transform of pixels of a video signal with subsequent quantization, for transmission at a reduced bit rate, said signal comprising a plurality of zero coefficients, and a plurality of non-zero coefficients (the Chen article discloses that discrete cosine transforms (DCT) may be used to generated DCT coefficients that are quantized which results in zero and non-zero coefficients, pages 225-227). The Chen article further discloses that a run of zero coefficients are coded with a codeword and the non-zero coefficients are coded with a separate codeword, and Huffman codewords are used to code the run of zero coefficients as well as the non-zero coefficients. The Pirsch patent, the Subramaniam '036 patent, the Subramaniam '222 patent, the Liao patent, the Saran '363 patent, the Saran '676 patent, the Van Voorhis patent and the Liao article, each discloses a combine coding technique to code a run of zero values and a non-zero value together using a

Application/Control Number: 90/010,104

Art Unit: 3992

single codeword which results in a higher level of compression. There is a substantial likehood that a reasonable examiner would consider these teachings important in deciding whether or not the claims are patentable. However, the prosecution history of the base application, US Serial No. 07/096,177, does not indicate that the combination of the Chen article and one of the Pirsch patent, the Subramaniam '036 patent, the Subramaniam '222 patent, the Liao patent, the Saran '363 patent, the Saran '676 patent, the Van Voorhis patent and the Liao article was included for consideration by the examiner in charge of the base application. Accordingly, the combination of the Chen article and one of the Pirsch patent, the Subramaniam '036 patent, the Subramaniam '222 patent, the Liao patent, the Saran '363 patent, the Saran '676 patent, the Van Voorhis patent and the Liao article raises a substantial new question of patentability as to claims 3-4, 8 and 11 of the '075 patent which question has not been decided in the previous examination of the '075 patent.

Application/Control Number: 90/010,104 Page 13

Art Unit: 3992

Scope of Reexamination

Since requester does not request reexamination of claims 1-2, 5-6, 9-10, and 12-13 and does not assert the existence of a substantial new question of patentability (SNQP) for such claims, these claims will not be reexamined. MPEP 2243 states:

The Office's determination in both the order for reexamination and the examination stage of the reexamination will generally be limited solely to a review of the claim(s) for which reexamination was requested. If the requester was interested in having all of the claims reexamined, requester had the opportunity to include them in its request for reexamination. However, if the requester chose not to do so, those claim(s) for which reexamination was not requested will generally not be reexamined by the Office.

Application/Control Number: 90/010,104 Page 14

Art Unit: 3992

Correspondence

All correspondence relating to this *ex partes* reexamination proceeding should be directed as follows:

By U.S. Postal Service Mail to:

Mail Stop *Ex Parte* Reexam
ATTN: Central Reexamination Unit
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By FAX to:

571-273-9900 Central Reexamination Unit

By hand to:

Customer Service Window Randolph Building 401 Dulany St. Alexandria, VA 22314 Case 1:08-cv-02526-BSJ Document 4-2 Filed 04/10/2008 Page 17 of 20

Application/Control Number: 90/010,104 Page 15

Art Unit: 3992

Any inquiry concerning this communication or earlier communications from the Examiner, or as to the status of this proceeding, should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

Conferee # 1

Conferee # 2

Minh Nguyen Primary Examiner 571-272-1748 Art Unit 3992

2107

3902

PTO/SB/08a (10-07) Approved for use through 10/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

respond to a collection of information unless it contains a valid OMR control Complete if Known 90/010,104 Substitute for form 1449A/PTO 4,901,075 Patent Number INFORMATION DISCLOSURE September 11, 1987 Filing Date STATEMENT BY APPLICANT Peter Vogel First Named Inventor

Art Unit

YOUNG, BRIANK Minh **Examiner Name** (Use as many sheets as necessary) Attorney Docket Number 223612-25

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (filmown)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
W		US-4,420,771	12/13/1983	Pirsch	
Ĭ		us-3,984,833	10/5/1976	Van Voorhis	
$\neg \tau$		us-4,092,676	5/30/1978	Saran	
1		US-4,136,363	1/23/1979	Saran	
		us-4,316,222	2/16/1982	Subramaniam	
		us-4,363,036	12/7/1982	Subramaniam	
		us-4,494,151	1/15/1985	Liao	
1		us-4,698,672	10/6/1987	Chen et al.	
'n		us-4,901,075	2/13/19/90	Vogel	
		US-	'\	1	
		US-	X		
		US-			
		US-			
		US-			

		b. FOREIGN PATENT	DOCUMEN	ITS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ "Number ⁴ "Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relovant Passages or Relevant Figures Appear	T ⁶
			X			
		· V				

Date Examiner 80/51/8 Signature

PTO/SB/08b (11-07)

Approved for use through 11/30/2007. OMB 0551-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Apt of 1995 no Persons are required to respond to a collection of information unless it contains a valid OMR control

Substitute for form 1449B/PTO				2. Com	plete if Known	90/010/10	,4
IN	IFORMATION			Patent Number	4,901,075		
DISCLOSURE STATEMENT BY			Filing Date	September 1	1, 1987		
			First Named Inventor	Peter Vogel			
_	APPLICANT		Art Unit	2 107	3992		
A	(Tise as many sheets as nece	esane)		Examiner Name	YOUNG -BI	Minh HANK	Nguya
Sheet	2	of	2	Attorney Docket Number			

		i. NON PATENT LITERATURE DOCUMENTS						
Examine r Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
8	1	WEN-HSIUNG CHEN, Member, IEEE, and WILLIAM K. PRATT, Senior Member, IEEE, "Scene Adaptive Code," IEEE Transactions for Communications, Vol. COM-32, No. 3, March 1984 (pg. 225-232)						
¢.	2	Block coding using a two-dimensional run-length table, 09.Sept.86 (7 pgs.)						
4	3	"Upper Bound, Lower Bound and Run-Length Substitution Coding", Henry H.J. Liao, Xerox Corporation, El Segundo, Calif. 90245, NTC'77 Conference Record Volume 3, IEEE Publication Number 77CH1202-2 CSCB, Library of Congress Card Number 57-20724 (7 pgs.)						
		X						
-								
Examiner Signature		Date Considered 3/17/68	<u> </u>					

^{*}EXAMINER: initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.79 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentially is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form entior suggestions for reducing this burden, should be sent to the Chief Internation Officer, U.S. Patent and Trademark Office, U.S. Department of Commence, P.O. Box 1450, Alexandria, VA 22313-1450. Int you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

NOTICE RE PATENT OWNER'S CORRESPONDENCE ADDRESS

Effective May 16, 2007, 37 CFR 1.33(c) has been revised to provide that:

The patent owner's correspondence address for all communications in an ex parte reexamination or an inter partes reexamination is designated as the correspondence address of the patent.

Revisions and Technical Corrections Affecting Requirements for Ex Parte and Inter Partes Reexamination, 72 FR 18892 (April 16, 2007) (Final Rule)

The correspondence address for any pending reexamination proceeding not having the same correspondence address as that of the patent is, by way of this revision to 37 CFR 1.33(c), automatically changed to that of the patent file as of the effective date.

This change is effective for any reexamination proceeding which is pending before the Office as of May 16, 2007, including the present reexamination proceeding, and to any reexamination proceeding which is filed after that date.

Parties are to take this change into account when filing papers, and direct communications accordingly.

In the event the patent owner's correspondence address listed in the papers (record) for the present proceeding is different from the correspondence address of the patent, it is strongly encouraged that the patent owner affirmatively file a Notification of Change of Correspondence Address in the reexamination proceeding and/or the patent (depending on which address patent owner desires), to conform the address of the proceeding with that of the patent and to clarify the record as to which address should be used for correspondence.

Telephone Numbers for reexamination inquiries:

Reexamination and Amendment Practice	(571)	272-7703
Central Reexam Unit (CRU)	(571)	272-7705
Reexamination Facsimile Transmission No	(571)	273-9900